

CLAIM AMENDMENTS

1. (Currently amended.) A retractable packing segment for an apparatus that extracts work from the expansion of a gaseous working fluid, said apparatus comprising:

a rotating shaft disposed in a casing,

a plurality of packing segments disposed in a ring and centered on an axis defined by said shaft to provide a seal therearound,

said retractable packing segment comprising:

an inner face for sealing against said shaft and an outer face

supporting a T-shaped extension, said inner and outer faces

and said extension spanning opposing common side ends,

said common side ends cut parallel with radii of said axis; and

at least one brush seal disposed on the inner face of said segment,

said brush seal having opposing ends, at least one of said

ends cut non-parallel with radii of said axis and extending past

one of said common side ends, and bristles of said brush

disposed at approximately the same non-parallel direction,

wherein said plurality of packing segments provide a

continuous (360°) brush seal around said shaft.

2. (Original.) The packing segment of claim 1, wherein both ends of said brush seal are cut non-parallel with radii of said axis.

3. (Original.) The packing segment of claim 1, said inner face further comprising a plurality of fins.

~~5~~ 4. (Original.) The packing segment of claim 1, said inner face comprising a plurality of brush seals.

~~4~~ 5. (Original.) The packing segment of claim 3, wherein the fins extend different distances from the inner face.

6. (Currently amended.) A retractable brush seal for an apparatus that extracts work from the expansion of a gaseous working fluid, said apparatus comprising:

a rotating shaft disposed in a casing,

said brush seal in the geometry of a ring formed from a plurality of adjacent abutting packing segments and centered on an axis defined by said shaft to provide a brush seal therearound,

each said segment being retractable and comprising:

an innerface inner face for sealing against said shaft and an outer face supporting a T-shaped extension, said inner and outer faces and said extension spanning opposing common side ends, said common side ends cut parallel with radii of said axis; and;

at least one brush seal disposed on the inner face of said segment, said brush seal having opposing side ends cut non-parallel with radii of said axis, with bristles disposed at essentially the same non-parallel direction, one of said side ends cut angled to form a tongue extending past the segment common side end and the other of said brush seal ends cut at the same angle relative to said segment to provide a groove inset from the common side end for accepting a tongue formed by a brush seal on an adjacent packing segment, wherein a plurality of segments provide an continuous (360°) brush seal ring around said shaft.

7. (Original.) The brush seal of claim 6, said inner face further comprising a plurality of fins.

8. 9 (Original.) The brush seal of claim 6, said inner face comprising a plurality of brush seals.

9. 9 (Original.) The brush seal of claim 7, wherein the fins extend different distances from the inner face.